

J.E.G.
1931

INDEPENDENT OFFICES APPROPRIATION BILL FOR 1930

HEARING
BEFORE
SUBCOMMITTEE OF HOUSE COMMITTEE
ON APPROPRIATIONS

CONSISTING OF

MESSRS. EDWARD H. WASON (CHAIRMAN), JOHN W. SUMMERS
JOHN C. ALLEN, THOMAS H. CULLEN
AND FRED M. VINSON

IN CHARGE OF

INDEPENDENT OFFICES APPROPRIATION BILL FOR 1930

J.E.G.
FEB 24 1941

SATURDAY, DECEMBER, 22, 1928.

SMITHSONIAN INSTITUTION

STATEMENTS OF DR. C. G. ABBOT, SECRETARY; DR. ALEXANDER WETMORE, ASSISTANT SECRETARY; DR. W. DE C. RAVENEL, ADMINISTRATIVE ASSISTANT AND DIRECTOR OF THE MUSEUM OF ARTS AND INDUSTRIES; DR. M. W. STIRLING, CHIEF OF THE BUREAU OF AMERICAN ETHNOLOGY; L. C. GUNNELL, ASSISTANT IN CHARGE OF THE REGIONAL BUREAU OF THE INTERNATIONAL CATALOGUE OF SCIENTIFIC LITERATURE; HON. R. WALTON, MOORE, REGENT; AND H. W. DORSEY, CHIEF CLERK

Mr. WASON. Have you a general statement which you desire to make before we take up the detailed items?

Doctor ABBOT. Mr. Chairman, Congressman Moore is here, one of the Regents of the Smithsonian Institution, and I would like, sir, if you would call on him first.

Mr. WASON. Very well, Congressman Moore.

Mr. MOORE. Mr. Chairman, I will only take two or three minutes to say that my understanding is the Bureau of the Budget recommends the appropriation carried in the last bill and, in addition, an item of about \$18,000, or a little more, which will be explained to you by the officials from the Institution. That will be all that is asked for by the Institution except, of course, the increases provided by the Welch Act which I suppose will necessarily be included. It seems to me there is not a great deal to say, except I presume you will want some explanation of how the \$18,000 item is to be used. That is about the condition of things. Doctor Wetmore, and Doctor Abbot can give you the explanation in detail of that item.

Doctor ABBOT. Mr. Chairman, as Mr. Moore has said, the matter is not much altered from last year except for the increases due to the Welch bill, with the exception of this item of \$18,000, which is really a combination item distributed around over all of the branches of the Institution, but more particularly for the National Museum, and Doctor Wetmore, my colleague, will explain it as he comes along to the various increases. I think perhaps it would be well, if you approve of it, to go on with the different branches *seriatim* and we will make explanation as we come to them.

Mr. WASON. Will you supplement what you have said by just showing how you distribute the \$18,000 increase as provided in the appropriation?

Doctor ABBOT. I will be very glad to do that, Mr. Chairman.

SALARIES AND GENERAL ADMINISTRATIVE EXPENSES

Mr. WASON. Now, Doctor Wetmore, your first item is:

For expenses of the general administrative office, Smithsonian Institution, including an additional assistant secretary at \$9,000 per annum during the present incumbency, compensation of necessary employees, traveling expenses, purchase of books and periodicals, supplies and equipment, and any other necessary expenses, \$36,004.

Doctor WETMORE. This estimate covers certain salaries and expenses of the general office of the Smithsonian Institution which is concerned in the administration of the Government branches which have been placed by Congress under the direction of the Institution. The appropriation requested is the same amount as that granted by Congress for the current year, with the addition of \$3,304 to cover increases in salaries due to the Welch Act.

Mr. WASON. There is an apparent increase in that item of \$3,504.

Doctor WETMORE. The only change in the amount of this item is due to the necessary increases to cover the salaries raised under the Welch Act. There is no further change in the appropriation. In other words, the items are exactly as they were last year, plus this increase brought about under act of May 28, 1928. You will recall that this item was inserted last year on the explanation that the Smithsonian Institution, for many years, had been carrying administrative overhead dealing properly with governmental administration; in other words, with the administration of the various bureaus that are carried on a governmental appropriation but that come under the Smithsonian Institution for their administration. It was considered that the expense to the Smithsonian from its private income (not from its appropriated income, but from its private income) had gone to such a point that the funds were not being used for the purposes indicated in the original gift. In other words, instead of carrying on scientific research with those funds, a large part of the money was occupied on this governmental routine. In recognition of that, the Bureau of the Budget, after investigation, recommended an item of \$25,000 to cover this administrative overhead. This was included in the report for last year to the committee and was passed favorably by the committee and was incorporated in the appropriation for 1929.

Doctor ABBOT. The item also includes the salary of the gentleman speaking to you, the assistant secretary.

Doctor WETMORE. That salary has been carried as a distant item in previous appropriations, but this committee combined the two items and reported it out in one; so that it was \$25,000 plus my own salary—making one item instead of two.

Mr. VINSON. The increase in salary of the additional assistant secretary, from \$7,500 to \$9,000; is that under the Welch Act?

Doctor WETMORE. Yes, sir. That is my own salary.

Mr. VINSON. The increase comes about under the provisions of the Welch Act?

Doctor WETMORE. Yes, sir.

Mr. WASON. And there are additional increases of different amounts—

Doctor WETMORE. All of the increases shown on the salary roll are those put into effect by the memorandum of the comptroller under the Welch Act. We simply took that and applied it and give you the results herewith.

Mr. VINSON. In the memorandum submitted, you speak of the sum of \$3,304.

Mr. WETMORE. Yes, sir.

Mr. VINSON. Which was increases due to the Welch Act, and I did not think that made up the difference between the appropriations.

Mr. DORSEY. Mr. Chairman, there is a difference of \$200 there. There were two salaries under this appropriation that were reallocated down by the Personnel Classification Board, which cuts off \$200 of the amount that we had carried under the Welch Act; so that, as submitted to the Bureau of the Budget, that figure was \$3,504. It is now \$3,304.

INTERNATIONAL EXCHANGES OF SCIENTIFIC AND CULTURAL PUBLICATIONS

Mr. WASON. Your next item is:

International exchanges: For the system of international exchanges between the United States and foreign countries, under the direction of the Smithsonian Institution, including necessary employees, and purchase of necessary books and periodicals, and traveling expenses, \$51,279.

Doctor ABBOT. This appropriation is to provide for the transmission of governmental and scientific publications between the United States and foreign countries in accordance with the treaty of Brussels. The addition of \$3,089 asked is to cover increases in salaries due to the Welch Act, \$2,147, and \$942 additional for freight. The cost of freight handled during the past fiscal year was over \$2,000 more than for the year 1926-27. Congress granted an increase of \$1,000 in the appropriation for the current year on account of additional freight. There has been no decrease in the amount of freight handled to date, to meet the additional cost of which the increase is asked.

You will recall, Mr. Chairman, that the international exchanges was an activity which was begun by the Smithsonian Institution for the purpose of carrying abroad its own publications and of receiving from other parts of the world those scientific publications which were useful for increasing the culture of this country. The work was begun about 1850. It was not long before the Government perceived the advantages of the system and, about 1870, the Institution began to carry, at its private expense, some publications for the Government. About 1880 the service had become a decided tax upon the private revenues of the Smithsonian, so that the Government began to make appropriations for the international exchange service and from then it grew, owing to the treaty with foreign powers, so that now there is an international service with agencies all over the world and a large number of Governments have joined in it. We send abroad now over a hundred sets of publications of the Government, complete sets in many instances, and also carry, in accordance with the treaty, the publications of scientific organizations (universities and the like) in this country, and receive, in return, corresponding publications, both government and scientific, from foreign countries.

The service is highly appreciated and I believe, sir, it is one of the greatest contributions of this country to the progress of culture and of civilization that this system of exchanges of scientific and cultural literature between this country and the world should have been inaugurated. At the present time the number of boxes of publications and the weight of them has grown a great deal and, with the recent change of costs and with the increase of the business, the freight amounted to some \$2,000 above the available means, and \$1,000 more than had been formerly appropriated was appropriated

last year on that account. This year, in order to make up the additional cost, which does not appear to be in any likelihood of diminishing, we are asking \$942 additional, to make up a round sum, in consideration of the increased amount of freight. Other than that, the difference in the appropriation over last year is due entirely to \$2,147 which comes from the Welch Act.

Mr. VINSON. You have an increase there of \$400 for transporting and conveying equipment, have you not?

Mr. DORSEY. That is simply the boxes, sir, and envelopes in which to send things.

Mr. VINSON. As I see it, the net increase is \$942; the freight item is \$942, and then there is an additional sum of \$100 for office devices; then an increase of \$400 for transporting and conveying equipment. That makes a total of \$1,442, and I presume that you took into consideration the \$500 that is in the reserve item. That has to be taken into consideration?

Mr. DORSEY. Surely.

Mr. VINSON. To show the net increase of \$942.

Mr. DORSEY. Yes.

TRANSPORTING AND CONVEYING EQUIPMENT

Mr. VINSON. What is that item of transporting and conveying equipment?

Mr. DORSEY. Why, boxes for documents and envelopes that we send records abroad in. We sent abroad last year about 3,000 packing boxes. That is about the average number. And we save a great deal in that item by making over the boxes that are returned, saving the good parts and having a carpenter there at the office make up new boxes from the good parts of the old boxes. It costs us about 25 cents a box to do that, whereas the cost of a new box is approximately \$1.

Mr. VINSON. In 1928 I see you actually expended practically the same sum that you had appropriated for 1929. Now, do you contemplate an increase in this activity?

Mr. DORSEY. In 1928 we actually spent about \$2,000 for freight over and above the appropriation.

Mr. VINSON. That is another item—the freight item is. I am speaking now of your transporting and conveying equipment. You have an increase there of \$400.

Mr. DORSEY. Oh, yes. That is simply to provide for the additional boxes to carry the additional freight that we have to send. That is all it is, sir.

AMERICAN ETHNOLOGY

Mr. WASON. Your next item is:

American ethnology: For continuing ethnological researches among the American Indians and the natives of Hawaii, the excavation and preservation of archæologic remains under the direction of the Smithsonian Institution, including necessary employees, the preparation of manuscripts, drawings, and illustrations, the purchase of books and periodicals, and traveling expenses, \$68,800.

Doctor ABBOT. Doctor Stirling, sir, has succeeded Doctor Fewkes, who was before the committee many times representing this bureau, and I will ask Doctor Stirling to speak for the Bureau of American Ethnology.

Mr. WASON. Doctor Stirling, we will be glad to hear from you.

Doctor STIRLING. This appropriation is for the scientific study of the American Indians and the natives of Hawaii, including their customs, languages, tribal organization, and archaeological remains. The increase of \$8,500 is to cover increases in salaries due to the Welch Act, \$5,200, and the salary of an additional associate anthropologist, \$3,300, who was added to the staff, I believe, the last fiscal year.

NEW POSITION OF ASSOCIATE ANTHROPOLOGIST

Mr. VINSON. One position has been added?

Doctor STIRLING. Yes; an additional associate anthropologist is included in the estimates for the year 1930.

Doctor DORSEY. It went into these estimates, sir. It is the salary of Doctor Fewkes, who was formerly chief of the bureau, who retired from the administrative office of the chief of the bureau and was made an associate anthropologist at \$3,000. This is to provide for his salary.

Mr. VINSON. Then you added him before the appropriation was made?

Mr. DORSEY. This is the first appropriation that salary is carried in. The Budget allowed it; yes, sir. We had to absorb that salary last year from other funds.

Mr. MOORE. That is part of the \$18,000 item?

Mr. DORSEY. That is part of the \$18,000 item.

Mr. VINSON. I am not able to find in the schedule submitted by the Budget any associate anthropologist being added.

Doctor STIRLING. The position was filled by Doctor Fewkes at his retirement as chief of the bureau.

Mr. VINSON. I understood you to say it had been filled.

Doctor STIRLING. The position was granted and he filled it.

Mr. VINSON. I understood Doctor Stirling to say that the position had been filled, and my query was if it were an additional appropriation—I just wondered how it could have been filled before the money was provided for paying the salary.

Mr. DORSEY. It was provided out of the general fund, sir, last year. We had no provision for it, and it was paid last year, but was paid out of the general fund. The Bureau of the Budget allowed us to carry it as an additional item in this year's estimate.

Mr. VINSON. How did you happen to have that much money out of the general funds?

Mr. DORSEY. We simply cut down the field work that much, the purchase of manuscripts and other things.

Doctor WETMORE. Doctor Fewkes has been an 'old and valued employee of the institution.

Mr. VINSON. I have no question about that, but we run into this thing again and again and again where there is covering up, and it seems to me it is part of our function to try and get the real picture. Now, I do not question his service and his value to the

institution; but it seems to me the Budget ought to come here and, instead of permitting a thing to come out of the general funds or asking us to appropriate additional sums to go to the general fund the should come, as they come now, and say that it is for a specific purpose. In other words, we can not keep track of it at all unless it is done that way. That is not the first instance in which it has happened.

Doctor ABBOT. I might add to this statement, in regard to this particular item, that Doctor Fewkes retired as the chief of the Bureau of American Ethnology on January 15, and, in consideration of his very long service to the institution and the fact he had work which was not fully done in the way of reporting upon his investigations, we desired very much to keep the services of the doctor.

We, therefore, took him on, with the approval of the Personnel Classification Board, as an associate anthropologist, at the rate of \$3,000. As Mr. Dorsey has said, we carried that item through the remainder of that fiscal year on that basis, and the purpose now, sir, is to ask Congress to appropriate for a position of an associate anthropologist. Since Doctor Fewkes has gone, we wish to have the opportunity of carrying on similar archeological work to his, with the services of such an associate in anthropology who will be devoted to archeology. This item is, to all intents and purposes, a new item which the Smithsonian Institution is asking of Congress in order to carry on with advantage similar work to that which Doctor Fewkes formerly carried on.

Doctor WETMORE. I think you can get the picture in this way: If you will notice in the column "Expended and obligated" in 1928, you will see there the salary \$5,400 for a senior anthropologist, but showing an expenditure of only six-tenths; in other words, only six-tenths of the year did we pay that salary. Doctor Fewkes retired at that time to a position of \$3,000 per year and the position of chief was technically vacant for a period of several months until Mr. Stirling's selection. During that period, in my capacity as Assistant Secretary of the Smithsonian, I assumed certain of the administrative duties of this position and carried them on in connection with Mr. Dorsey, the chief clerk. Then, when the matter came up before the Bureau of the Budget for discussion, they allowed the addition of a \$3,000 position to carry Doctor Fewkes along and, immediately after that, we filled the position of chief of the bureau again.

Mr. VINSON. Then for the present fiscal year out of what fund or what moneys will you pay Doctor Fewkes?

Doctor WETMORE. Simply through a retrenchment in the field work that the bureau has been carrying on.

Mr. VINSON. Is that under your general fund?

Doctor WETMORE. No, sir; the retrenchment is indicated under "Travel expenses" on the succeeding page.

Mr. VINSON. Is that under the paragraph which begins—

For continuing preservation, exhibition, and increase of collections from the surveying and exploring expeditions of the Government, and from other sources, including necessary employees, travel."

And so forth?

Doctor WETMORE. No, sir.

Mr. VINSON. Point out what paragraph this salary is to be paid under during the present fiscal year.

Doctor WETMORE. It comes under the item for the Bureau of American Ethnology, sir, the item now under discussion.

Mr. VINSON. Then, according to that, the Bureau of the Budget approved it for 1929 and this is not in the nature of a retrenchment?

Doctor WETMORE. They approved it for 1930 with the understanding we would carry it as best we could under this appropriation for 1929.

Mr. WASON. Is that the item which was spoken of a few minutes ago of \$3,000 for one new man?

Doctor WETMORE. Yes, sir.

Mr. WASON. I can not find there is anybody on this salary roll for 1929 at a salary of \$3,000.

Mr. VINSON. Neither can I.

Doctor WETMORE. Here is the explanation for that: When this matter was taken up before the Bureau of the Budget before the application of the Welch Act we discussed it as a \$3,000 position, as at that time there was uncertainty as to just how the Welch Act should be applied. Under the Welch Act it is increased automatically as indicated.

Mr. WASON. And how much would it be with the Welch Act?

Doctor WETMORE. \$3,300.

Mr. DORSEY. \$3,300 is the Welch Act figure for that.

Mr. WASON. It is carried in this bill as \$3,300?

Doctor WETMORE. Yes, sir. Of that amount, \$3,000 is the addition allowed by the Budget for this position, and the remainder is the increase under the Welch Act. Is that right, Mr. Dorsey?

Mr. DORSEY. Yes.

Mr. WASON. Then, as a matter of fact, the total of that column should be reduced \$300; should it not?

Doctor WETMORE. No, sir. All of these estimates, in discussion with the Budget, were taken up without reference to the Welch Act.

Mr. DORSEY. These figures here are the Welch Act figures.

Mr. VINSON. The estimates for 1930 include the Welch Act?

Mr. DORSEY. Yes, sir.

Mr. VINSON. Added to the estimated expenses for 1929?

Mr. DORSEY. That is right.

Mr. WASON. Have you one man in your bureau who is drawing a salary as associate editor at \$3,300?

Doctor WETMORE. Yes, sir. That is another position than the one under discussion.

Mr. WASON. You have a man drawing that amount?

Doctor WETMORE. Yes, sir. The statement is simply this, gentlemen: At the time this matter was taken up before the Budget this was a \$3,000 item. Then the operation of the Welch Act increased it, and it is shown here with the \$3,000 permitted by the Budget and the Welch Act increase.

Mr. VINSON. But it is carried as a \$3,300 item in the 1929 estimates submitted by the Budget on the schedules which they submit to us. It is right here.

Mr. DORSEY. We had that position.

Doctor WETMORE. The difficulty is caused by the fact it is now indicated as a new item.

Mr. WASON. Well, did you have that position before?

Doctor WETMORE. No, sir; that is a new position.

Mr. WASON. Well, why is it put down as a position, then, in the 1929 appropriation?

Mr. DORSEY. Well, we have that position now, sir. We had to carry Doctor Fewkes. There was no provision made in the appropriation for 1929 for the salary of that associate anthropologist and, if you will look further along in the schedules, you will see we had to make a reduction in certain other expenditures in order to provide that \$3,300. In 1928, Doctor Fewkes was paid for six months as chief of the bureau and, for four months, as associate anthropologist, having retired meanwhile. Mr. Stirling had not then been appointed. We had the salary in 1928 to pay Doctor Fewkes, but, when Mr. Stirling was appointed we had to ask the Budget for \$3,000 in the estimates of 1930 in order to carry it. In 1929 it was not appropriated for specifically, but it was authorized by the Personnel Classification Board, and we were expected to pay that out of savings in other items. We could not do as much field work and could not buy as many manuscripts.

Mr. WASON. Are there any further questions?

Doctor ABBOT. I think Mr. Stirling has brought up certain exhibits here which will show something that is very interesting in regard to the work of the bureau, if you would like to see them.

Mr. VINSON. Just one word on this item. Under the schedules submitted to us, the estimated expenditures for 1929, in this item, are \$56,238. It requires this item of \$3,300 to be considered in order to arrive at that total. Now, if this committee did not appropriate for that position, or for a sum of money or for positions which would carry in salary that sum of money, I can not understand how that figure of \$56,238 could be arrived at.

Mr. WASON. I can not get it through my head, either.

Doctor WETMORE. It is an emergency expenditure.

Mr. WASON. Well, where does the money come from?

Doctor WETMORE. From the funds allowed for travel expenses and the other expenditures of the bureau.

Mr. DORSEY. You see, they have been cut down, Mr. Wason.

Mr. VINSON. Then do you mean that in the items below the total of the salaries, in supplies and travel and such items, they have been decreased and this item put in?

Doctor WETMORE. Yes, sir.

Mr. DORSEY. If you will look at the "travel expense," you will see we actually spent in 1928, \$5,516.73. We estimate to expend in 1929, \$4,530. There is a saving of \$1,000 right there.

Mr. VINSON. But in the estimate for 1929 it was only \$4,530.

Mr. DORSEY. Certainly, because we had to cut that down to get the money to take care of the salary of \$3,300 for the associate anthropologist.

Mr. VINSON. That is an entirely different year. Your \$5,516.73 was expended in 1928.

Mr. DORSEY. Certainly.

Mr. VINSON. Now that has no connection whatever with your column for 1929. Your \$4,530 is included in there and makes your total, and the difference between that sum and the sum for the

previous year is not available for insertion in any other portion of the schedule, because the money is just simply not there.

Mr. WASON. Will this explain it? In 1929 did you have a man in this position drawing, we will say, \$3,000?

Mr. DORSEY. Yes, sir.

Mr. WASON. And what has become of him now?

Mr. DORSEY. That is Doctor Fewkes, sir.

Mr. WASON. Who was then drawing \$3,000?

Mr. DORSEY. Yes, sir.

Doctor WETMORE. We are now in 1929.

Mr. WASON. Yes; and you estimate \$3,300 for the same position for 1930?

Mr. DORSEY. Yes, sir.

Mr. WASON. That seems to explain it.

Mr. VINSON. Not at all: because they say they never made any request for this salary for this amount for the year 1929, and they say that the money which pays his salary for 1929 is not taken out of the salary expense, but it is taken out of some other fund.

Mr. DORSEY. It is taken out of miscellaneous field work. We have done less miscellaneous field work and we expect to do less field work. We had to cut down and save the amount of that salary to take care of it.

Mr. WASON. Then he did not draw the salary in 1929 of \$3,300?

Mr. DORSEY. Yes, sir.

Mr. VINSON. Certainly he did.

Doctor WETMORE. It may be explained on this basis: In general, this appropriation is divided into two parts—first, the salary roll; and, second, the amount required in the operation of the bureau. As an emergency expenditure, it has been required for 1929 to take this amount out of the sums usually allotted for the general expense of the bureau and to use it for salary. The picture is shown in the totals at the bottom; the appropriation for 1929 shows \$65,800 total expenditure, and the estimated expense for 1930 showing \$68,800. The difference there is \$3,000, which is the amount added for this salary, except in so far as the Welch Act is concerned. The Welch Act is a matter taken care of in the salary roll proper.

Mr. VINSON. In short, Mr. Chairman, under the estimate submitted to us there is no increase in any amount under the salary item.

Mr. MOORE. Mr. Vinson is trying to find out from you gentlemen, as I understand, how it is that the item of \$3,300 is listed there in the 1929 expenses.

Mr. VINSON. And charged against the salary item.

Mr. MOORE. Because he understood, first, that you had \$56,000 plus without any item in there of \$3,300, and that you took the \$3,300 out of your general fund by decreasing some expenditures in other directions.

Mr. DORSEY. Yes, sir; that is the way it is done.

Mr. VINSON. And not from salary expenses, but from travel and incidentals?

Mr. DORSEY. Yes, sir.

Mr. VINSON. In other words, Doctor Wetmore, you say there is an increase in the salary item of \$3,000 between the 1929 estimates and the 1930 estimates.

Doctor WETMORE. Actually there is.

Mr. VINSON. That may be perfectly true; but, according to the estimate submitted to us, the total estimated expenditures for 1929 are \$56,238; the estimated expenditures for 1930 are \$56,780, and in both years, 1929 and 1930, there appears an item of one associate anthropologist with a salary of \$3,300 in each year.

Doctor WETMORE. Mr. Vinson, may I call your attention to the totals for this item. For 1929, the total expenditure was estimated at \$65,800, and the estimates for 1930 show an estimated total expenditure of \$68,800. The difference there is \$3,000. Now, that is this salary position, except as the Welch Act is concerned. In other words, the actual addition to the appropriation, aside from the Welch Act, is \$3,000, which is this position.

Mr. VINSON. Here is an item of increase of \$2,000 down here in the furnishing of food and lodging while in travel status. The 1929 estimated appropriation was \$3,000 and the estimated expenditure for 1930 is \$5,000.

Mr. DORSEY. Yes, sir.

Mr. VINSON. So that there is a difference of \$2,000 in that one item. That is part of the \$3,000 increase down in the totals of the two columns. Then in the items evidencing the expenditure for total equipment, for 1930, on the schedule submitted to us by the Budget, there is an increase of \$893 in 1930, as against 1929. And when you take those two items together, the \$2,000 item and the \$893, you get almost the \$3,000. And, by examination, you can very easily pick up the few dollars that will make up that difference.

Did you make a request, Mr. Wetmore, for an increase in the appropriation for the item "Furnishing of food and lodging while in travel status"?

Doctor WETMORE. No, sir. The only request made for appropriations under the Bureau of American Ethnology has been this \$3,000 for this position, plus whatever the Welch Act might bring.

Mr. VINSON. That is the only request that you made?

Doctor WETMORE. Yes, sir.

Mr. DORSEY. Here is what we submitted to the Budget right here, and this shows the increases asked for [indicating].

Mr. VINSON. Do you take issue with the statement that there was not a request for an additional sum of \$2,000 for food and lodging while in travel status?

Mr. DORSEY. This is a copy of the estimate [indicating].

Mr. VINSON. I did not ask you that. Doctor Wetmore said that there was no request for any additional appropriations under this item, except that which would be carried due to the Welch Act and the item of \$3,000 to pay an associate anthropologist. Now, did you make request for any additional appropriations under this item?

Mr. DORSEY. Simply for those two items. That was in addition to the appropriation for the current year; yes, sir.

Mr. VINSON. Then you did not make any request?

Mr. DORSEY. No specific request; no.

Mr. VINSON. You made no request for an increase in the appropriation for food and lodging while in travel status of \$2,000 or any sum?

Mr. DORSEY. Not specifically; not any more than contained in these items as submitted to the Budget.

Mr. VINSON. Did you submit this green sheet as a request to the Bureau of the Budget for an appropriation in 1930?

Mr. DORSEY. There it is, sir; right here.

Mr. VINSON. I say did you submit this to them or did they submit it to you?

Mr. DORSEY. We submitted it to them. Here are our figures that we sent in to them.

Mr. VINSON. Then those figures show a request was made for the sum of \$5,000 for food and lodging while in travel status; also an increase of \$2,000 over the estimated expenditures for 1929, and also an increase of \$893 in 1930 as against the 1929 appropriation, in the item which we have referred to as "Total equipment"?

Doctor WETMORE. The total appropriation, however, for 1929 is \$3,000 less than the estimate for 1930. The apparent difference in the items to which you call attention is due to an administrative distribution of the appropriated funds. The total appropriation for 1929, under which we are at present working, calls for \$65,800. We are not necessarily absolutely bound by these figured estimates; we offer them as our reasonable estimate for what the year will call. We will spend the money in accordance with this general plan; but as an emergency arises under one item or another it may be necessary to make some shift in these funds.

Doctor ABBOTT. Mr. Chairman, I will call attention to the fact we are asked to make an estimate in May, I believe, for the expenditures of the fiscal year beginning July 1 of the next year following. That is something like 14 months prior to the beginning of the expenditure of that money.

The ending of the expenditure of that money asked for is something like 26 months after we are asked to estimate. Now, sir, if we were to bind ourselves to spend every penny exactly as we estimate there from 14 to 26 months previous to the spending, we would not be able, without any discretion, to carry on properly the business of the bureau. It is necessary, sir, that the administrative officers must have some discretion, and we make the figures to show as best we can, 14 to 26 months before the event, what the probable expenditures will be; but we do not think we are bound, sir, to spend exactly those sums to the penny, for those purposes and no other, but that we can have some administrative discretion in the distribution of those sums as between different items.

Mr. VINSON. Then you do not consider you are bound in any way whatever in the estimates you submit, or that come to Congress?

Doctor ABBOT. We are bound by the total of the estimate and we, as nearly as possible, inform the Congress as to how that will be spent. But I do not feel, sir, we are bound to spend exactly a certain sum for travel and exactly a certain sum for excavation, and the like. But the total being the same and the expenditure being based for the benefit of the service, I think we are doing our duty in the matter, sir.

Mr. VINSON. I was trying to protect you. You said that you had asked for an increase of \$3,000 and, according to these figures, you have not asked for an increase of \$3,000.

Doctor ABBOT. If the Congress shall appropriate the total of the sums asked for, we will be satisfied.

Mr. VINSON. Well, we have a perfect right, I want to assure the gentleman, of inquiring into these items irrespective of who it hits.

Doctor WETMORE. The items are laid down in a schedule which it is intended to follow as closely as may be, but each year there may arise certain emergencies that have to be met and it may be necessary to readjust funds to meet them; otherwise, the only recourse is an appeal to the deficiency appropriation.

Mr. VINSON. I never had a single thought in my mind relative to the manner in which you have been spending your money. I have been giving you the full benefit of the doubt clear through my discussion. But we have certain figures here in front of us and you made certain statements in regard to increases and we were trying to find out whether they were actual increases.

So far as I am concerned, I do not see how, under these figures, you have asked for an increase of \$3,300. You made the statement you were paying a salary of \$3,300 out of moneys appropriated for other purposes.

Doctor WETMORE. Yes, from funds estimated for other purposes.

Mr. VINSON. And, of course, that naturally brought on the inquiry; because, if you did not need the money for other purposes, possibly the appropriation should be curtailed.

Doctor WETMORE. We meet here one of those emergencies I have mentioned where we have found it necessary to draw on money, that would be used ordinarily in the other work of the bureau, to maintain Doctor Fewkes.

Mr. WASON. Well I guess we understand it now.

Mr. VINSON. I do not, but I am perfectly willing to pass on to another item.

Mr. WASON. You understand how they are going to get the money.

(Doctor Wetmore supplied the following statement:)

The increase asked comprises \$5,500 for increases of salaries under the provisions of the Welch Act and \$3,000 to restore the items of travel expenses, equipment, etc., to their normal level. The latter items were curtailed by us during the present fiscal year to provide necessary funds for the appointment, approved by the Personnel Classification Board and the Bureau of the Budget, of a new associate anthropologist, this position being established after the appropriation for 1929 had been made, and therefore was not carried in our estimates for that year. (See p. 84, Budget, 1929.)

The Bureau of the Budget has allowed an amount for 1930 sufficient to continue this salary and to restore the items of travel expenses and equipment to their normal level. The curtailment of these items during the present year (1929) has necessitated the postponement of certain investigations contemplated under this appropriation. However, due to the more urgent need for the new associate anthropologist, it was decided to defer these contemplated investigations until 1930 in order to provide the salary for this much-needed new position.

INTERNATIONAL CATALOGUE OF SCIENTIFIC LITERATURE

Mr. WASON. We will pass on to the next item, which reads as follows:

International Catalogue of Scientific Literature: For the cooperation of the United States in the work of the International Catalogue of Scientific Literature, including the preparation of a classified index catalogue of American scientific publications for incorporation in the International Catalogue, clerk hire, purchase of books and periodicals, traveling expenses, and other necessary incidental expenses, \$7,885.

Doctor ABBOT. Under this appropriation the Smithsonian Institution conducts the regional bureau for the United States of the International Catalogue of Scientific Literature, which is a cooperative international organization for the publication of an international catalogue of the scientific literature of the world. The appropriation requested is the same as that for the current year, with the addition of \$425 to cover increases in salaries due to the Welch Act.

Mr. WASON. And there is an increase of \$425?

Doctor ABBOT. Mr. Chairman, the estimate is, as you have said, increased over the appropriation for 1929 by \$425. That covers the application of the Welch Act and nothing else, sir.

Mr. WASON. All due to the Welch Act?

Doctor ABBOT. Yes, sir.

Mr. WASON. Please explain what you have been doing under this appropriation, and the status of the work?

Doctor ABBOT. Mr. Gunnell is here, sir, and will answer to that item.

Mr. GUNNELL. Due to the unfortunate conditions of war, the actual publication of this work had to be suspended. In 1922 the various bureaus taking part in it (33 distributed throughout the world) met at a convention which was held at Brussels in that year. Although it was not evident at that time nor is it still how the actual publication will be continued, they each and all of them agreed to continue the work of their several bureaus pending the time when money could be gotten to resume the publication. I have told the Bureau of the Budget and your committee each year that, pending the resumption of the publication, every possible means would be taken to use as little of this appropriation as possible. Last year we turned back into the Treasury some \$1,392. This present fiscal year, out of that appropriation, there is \$2,300 to go back.

The reason I have recommended our Secretary to ask the full appropriation (and on account of my recommendation he has done so), is due to the fact that if the publication is resumed at any time it will be necessary to have that total amount for the United States to take its part in the work. If we did not have the whole amount available, we would have either to stop the work or to apply for an emergency appropriation, which would be rather difficult to do—practically impossible. I gave you the figure a moment ago that we turned back in 1928, practically \$1,400; and, this year, it will be \$2,300.

Mr. WASON. Will you need all of this appropriation or can we reduce it?

Mr. GUNNELL. I wanted to explain the reason I did not want to have it reduced which was that, in the event of this work starting up at any time, we will need every cent of that and probably more.

Mr. WASON. And you want to have it carried as being available?

Mr. GUNNELL. Exactly as it is.

Mr. WASON. But you do not expect to use it this year?

Mr. GUNNELL. No, sir.

ASTROPHYSICAL OBSERVATORY

Mr. WASON. The next item is:

Astrophysical Observatory: For maintenance of the Astrophysical Observatory, under the direction of the Smithsonian Institution, including assistants, purchase of books, periodicals, and apparatus, making necessary observations in high altitudes, repairs and alterations of buildings, preparation of manuscripts, drawings and illustrations, traveling expenses, and miscellaneous expenses, \$36,720.

Doctor ABBOT. The Astrophysical Observatory is engaged in the study of solar radiation, on which all forms of life on the earth depend. The appropriation asked is the same as that for the current year, with the addition of \$3,430 to cover increases in salaries due to the Welch Act.

Mr. WASON. There is an increase in that item of \$3,430.

RADIATION OF THE SUN

Doctor ABBOT. That, also, is exactly the increase carried by the provisions of the Welch Act. The Astrophysical Observatory has been for many years under my direction. At the present time, we have a central organizing office in Washington, where we direct and study the observations which are made at our stations in California and in Chile and, in cooperation with the National Geographic Society, at another observatory in southwest Africa. These observations relate to the amount of heat which the sun sends to the earth and on which all life on the earth depends. We, sir, are the only organization in the world which is carrying on measurements of that kind in a fundamental way.

The results this year have been very interesting, in that, although there has been rather a quiet condition of the radiation of the sun, so that there has been neither much change in the way of increase or decrease, yet combined with the results of previous years they indicate, sir, certain periodicities of variation of the radiation of the sun. There is one period of about 2 years, another one of about 15 months, and another one of about 11 months which, being superimposed on the sun-spot cycle of 11 years, make up what seems to be a predictable variation of the sun. I ventured, for the first time in public, a few days ago at the conference on cycles which was held by the Carnegie Institution to show the gentlemen there what we might expect as the course of the variation of the sun for the next several years to come. I brought the picture along with me. You will see that this figure here [indicating] represents the march of the solar radiation by the monthly mean values for the last eight and a third years, ending here in October [indicating]. This red curve is the actual observations; the black curve is the proof of the analysis that was made. The red curve indicates the actual march of the variation of the sun for 100 months.

Based upon that, Doctor Miller, of Cleveland, with the aid of his interesting and very ingenious apparatus, has found certain periodic features of which I have just spoken, that of about 25 months, that of about 15 months, and that of about 11 months. These make up, together with their overtones, the curve which you see below here

[indicating]. It represents the periodic part of the variation of the sun, so far as this evidence enables us to understand it. There are certain variable features which are included in the original observations which are not included in the lower curve [indicating]; but if the sun should continue to march along that periodic course which I have just explained, then we might expect, going on from here [indicating], this interesting series of variations in the years immediately to come.

It will interest the committee to know that a year ago, when we were at this point here [indicating] of this curve, I wrote to a friend of mine in Massachusetts that he might expect the sun's radiation to be in a high condition in May and a low condition in November. This was the high condition that actually came in May and this the low condition which actually came in November [indicating].

Now, sir, if such expectations should again be verified in the extremely interesting period which is forecasted by the machine here [indicating], we may even hope that we are standing on the verge of that happy condition to which the late Secretary Langley referred when he used to speak of Joseph's forecasting the seven years of plenty and the seven years of famine in Egypt. I bring this to the attention of the committee as a reason why this work is worth further carrying on; not that I feel certain that this will be the course of events; but, so far as this long history here indicates, it is the course of events which we will expect for the next several years.

Mr. WASON. That is an observation of how many years?

Doctor ABBOT. This curve which I show here [indicating] represents the last eight years and four months. We have, of course, been carrying on that work much longer than that, but the daily observations did not begin until the Chilean observatory was erected in 1918, and for a time the daily observations there were not as full as they have since become. So that for the purpose of determining the influence of the 25-month period this was the best evidence which we had at that time available. I feel, sir, and our scientific friends the world over seem to feel, that it is very incumbent upon us to carry on these measurements. The observations are only in part carried by the Government.

The Smithsonian Institution puts in, in addition to what the Government puts in, out of its private means, about \$6,000 a year. Several years ago my friend, Mr. John A. Roebling, of Trenton, N. J., became very much interested in it and put in, of his own money, over \$100,000 in equipping the buildings of which the Government has the advantage. So that we are not really asking for as much of an appropriation as we are actually using in this matter; there have been other means which we have devoted to it.

Mr. SUMMERS. What is the practical interpretation of this?

Doctor ABBOT. Well, sir, if there be a variation of the sun's radiation, then the temperature, the rainfall, the barometric pressure of the earth will be altered in connection therewith and the growth of food plants will also probably feel those effects.

PROBABILITY OF LONG-RANGE WEATHER FORECASTS

Mr. MOORE. You are looking to the probability of long-range weather forecasts?

Doctor ABBOT. Yes, sir. That is the utilitarian aspect of it. The scientific aspect of it is of very great interest to the students of the sky and the heavenly bodies; but there is a very perceptible hope that this sort of thing may lead to forecasting weather conditions, either favorable or unfavorable to the growth of crops, for seasons in advance. We are not ready as yet to make public forecasts that such and such will be the condition of the summer or the winter; but I said to a few of my friends over a year ago that this, which you see, actually occurred in May, 1928, a high condition of the sun, would be associated with cool temperatures in the Eastern States; and this [indicating] low condition of the sun, which actually occurred in the late autumn of 1928, would be associated with warm conditions in the Eastern States in the fall. It turned out so this year. Whether similar tentative forecasts will be verified another year I do not know.

Apparently the different parts of the world are differently affected by variations of the sun and by other circumstances. If you will follow the meteorological reports, you will see a general tendency that when the Eastern States are above normal, California and the Pacific States will be below normal. In other words, different parts of the world do not respond in the same manner to the same causes. That is probably associated with the march of the winds which, as you know, circulate over great areas of thousands of miles in a certain cyclical manner.

If these centers of circulation should go to the north or to the south, then the direction of the wind at all stations in the neighborhood will change. I have no doubt that it is quite familiar to the gentlemen of the committee, that if the winds be generally southerly, then you have warm weather; if they be generally northerly, then you have cold weather. So that the mere shifting of the circulation of the atmosphere, without any change in the heat of the sun at all, would produce a variation in temperatures at local places. It is a fact that the oceanic circulation is of much importance in the temperatures, and the fact of the existence of deserts and mountains and other complex configurations of the earth provide reasons we can not predict in a simple way the result of the variations of the sun. That is, you can not say that if solar radiation increases the temperature of the whole world in all parts would increase, or if you decrease the solar radiation, that would make the temperature of all parts of the world decrease.

Indeed Doctor Simpson, Director of the British Meteorological Service, has very recently put out a publication in which he has discussed the effects of the variation of the sun, what effect, theoretically, it should produce on the temperature of the earth. He even indicates that if the sun, in former ages, did at some time increase somewhat in its radiation, the effect of that would tend to have brought on the glacial period which occurred in North America. I repeat: He points out that a small increase of the radiation of the sun over what prevails now, under our peculiar conditions of cloudiness, humidity, oceanic circulation, and so on, would have brought on not an increase of temperature in North America, but a decrease in the temperature of North America similar to what occurred in the glacial period. The whole subject, so far as it relates to a practical application of

these variations of the sun, is exceedingly complex, and will require a very great amount of study by the meteorologists of great tabulations of statistics from many parts of the globe before the influences of these changes will be analyzed for practical predicting purposes.

EFFECT OF GREAT LAKES ON ASTROPHYSICAL WORK

Mr. WASON. I suppose the Great Lakes are not of sufficient importance to affect what you have been discussing?

Doctor ABBOT. Not so much, I think, sir, as the ocean, by a great deal, and yet they no doubt have their effect which might, in their immediate vicinities, be of importance.

Mr. SUMMERS. This high variation you predicted, and it proved to mean a cooler temperature there in New England and here a low temperature, but you say that does not obtain throughout the United States. In what part of the United States will you apply this?

Doctor ABBOT. As a matter of fact, sir, the necessary statistical investigations as to the effects of variations of the sun on the temperature have only been made thus far (and those only by one man) for the eastern and northern United States. It is a very great task, sir, and so far as I know the Weather Bureau is not yet of the opinion that the work has gone on long enough to furnish a satisfactory basis for it. So that it is only only outside parties who will have made such statistical investigations, and I am only aware of one gentleman who has announced definite conclusions. It is on his view of the matter that I ventured in November, 1927, to say to a few of my friends that we might expect in Washington a cool spring in 1928 and warm weather around the neighborhood of Thanksgiving in 1928.

RADIATION OF THE STARS

The work of the observatory, of course, embraces other features besides that of the study of the radiation of the sun. During the past summer I was out to Mount Wilson, in California, and carried on there a study of the radiation of the stars, taking the heat from a star, collecting it with the great 100-inch telescope and measuring the heat in its spectrum. This work was done with an instrument composed of the wings of a common housefly. It was so exceedingly delicate that the wings of a single housefly would be sufficient to make half a dozen of those instruments. With such an instrument I was not only able to observe the heat of the star but the distribution of that heat in the different colors of the spectrum. I received a letter the other day from Dr. Henry Norris Russell, director of the observatory at Princeton, in which he said there was nothing I could do that would be more important than to carry on this study of the distribution in the spectrum of the radiation of the stars. I wrote and asked him why he thought so; that I had already set out to do a good many kinds of work which, for the public interest, seemed superior to this, which I had regarded more or less in the way of a stunt. He came back with several pages in which he went on to show how very great an interest was attached to these measurements of the spectra of the stars by scientific men.

NATIONAL MUSEUM

SALARIES AND GENERAL EXPENSES

Mr. WASON. The next item it:

For cases, furniture, fixtures, and appliances required for the exhibition and safe-keeping of collections, including necessary employees, \$33,240.

The current appropriation for this item is \$29,560. What does this estimate provide for?

Doctor WETMORE. This appropriation provides for cases, furniture, fixtures, and appliances, including pasteboard boxes, trays, glass jars and vials, and other similar things needed in the care and preservation of the national collections, which are now estimated at over 11,000,000 specimens.

The estimate submitted for 1930 exceeds the current appropriation by \$3,680.

Of this amount, increase in the salary roll due to the Welch Act amounts to \$1,240.

The sum of \$500 is allotted on the salary roll to cover a one-rate step-up for seven skilled employees of long experience, these including cabinetmakers, carpenters, and painters employed in our shops. Six of these, though having high efficiency ratings, did not benefit by the general efficiency promotions granted last year by the Committee on Appropriations, as when this subject was before the committee these six employees were at the average of their grades, and nothing was asked for them. Since then the Personnel Classification Board, recognizing that these employees were paid less than similar workers elsewhere in the Government service, has reallocated their positions to a higher grade, thus removing the restriction from promotion. It may be added that in this reallocation by the Personnel Classification Board these employees received no increase in salary, since the average salary of the old grade was in each instance the initial salary of the new one. The step-up indicated is entirely warranted by the efficient service rendered.

The item of \$1,940 is required in addition to the allotment of last year for scientific equipment, materials, and supplies. The large annual increment of specimens greatly taxes the resources of the museum for storage cases, boxes, trays, jars, vials, and other containers to safeguard our collections. This small addition of \$1,940 will be most carefully expended where it will best serve in preserving Government property. It may be noted that in 1928 the museum received 832,912 specimens of all kinds that it found desirable to preserve, a number double that which came to us the preceding year. This increment of material included among other matters the bequest of the C. F. Baker insect collection comprising 300,000 specimens, one of the finest gatherings extant from the Philippine Islands.

The National Museum is the depository of the national collections of natural history and other similar objects. The increase shown under the first item of appropriation for the National Museum, that of furniture and fixtures, estimated for the year 1930, amounts to \$3,680. Of this amount the increase in salaries due to the Welch Act is \$1,240. In addition to that, the Bureau of the Budget has approved an estimate for a one-rate step-up for the seven skilled

employees carried under this appropriation. These employees include the cabinetmakers, carpenters, and painters employed in our shops. These men are occupied in making our exhibition and storage furniture and in the various other matters of similar nature that we require to have in the transaction of the affairs of the organization. They are highly skilled men, well trained, all of them. Six of these men did not benefit by the increase in salary allowed for efficiency as recommended by this committee last year and granted by Congress. At that time they were at the average rates of their respective grades. Since then the Personnel Classification Board has considered the work that they are doing in relation to that of men doing similar work in other agencies of the Government and has granted them a reallocation to a higher grade, but this reallocation did not bring to them an increase in compensation, since the average rate for the old grade in which they stood is exactly the entrance rate of the new grade. However, this reallocation opens the way for a legitimate promotion for them. The Bureau of the Budget, in considering this matter, has allowed therefor an addition of \$500 for a one-rate step-up for these men for 1930.

PRESERVATION OF SPECIMENS

The further addition of \$1,940 is approved for additional storage for our collections. During the year just passed, the National Museum has received upward of 800,000 specimens which have been deemed worthy of preservation, really a tremendous number—more than double that which have come to us under any previous year. This great increase has been due primarily to the bequest of the Baker collection of insects. Doctor Baker, an American, resident for many years in the Philippine Islands, assembled a tremendous collection of insects from the Philippine Islands and the Malayan countries in general—one of the finest collections of the kind every brought together. In his will he made provision at his death to have this material come to the National Museum. His death occurred a year and a half ago and the collection has now come to us. It includes about 300,000 specimens which are of great value to the entomologists working under the Government and elsewhere in this country.

The National collections housed in the National Museum really form a national asset and one of great importance. Recently we were called upon by the Bureau of Efficiency for an estimate as to the value of the collections of the National Museum with the result that this was placed at \$115,000,000. Now this does not mean that if \$115,000,000 were available the collections could be duplicated. That could not be done for double the sum mentioned. The National Museum has had its growth over a period of 80 years, and many of the things that have come to us in that period are unique and could not be duplicated anywhere in the world. They could not be replaced if they were destroyed.

EXAMPLES OF SPECIMENS RECENTLY RECEIVED

The specimens that come to us annually cover a very wide range of objects. As examples of this we receive sets of the new issues of stamps transferred from the Post Office Department as they appear.

and during the past year we were given Lindbergh's plane, *Spirit of St. Louis*, as part of the 800,000 articles that I have previously mentioned. I have also spoken of the Baker collection of insects. Possibly you may care to examine examples of a very few of the interesting things we have received which I have brought with me. Here is an aboriginal stone hoe made of chert which comes from Nebraska. The model on which that hoe was fashioned is believed to be the shoulder blade of a buffalo. A wooden handle was fastened to it and it was used in digging. It is one of the finest of the kind I have ever seen. You may recall the researches of the late secretary of the Smithsonian Institution, Doctor Wolcott, in paleontology, particularly with the trilobites. We have recently received a very fine specimen of this group [exhibiting]. It is a crustaceanlike animal, of a group now extinct, that flourished in tremendous numbers from pre-Cambrian times on up into the Silurian. This particular specimen is from the Silurian. It is a fossil and, according to the sedimentation method of computation, its age is estimated at 75,000,000 years.

I have spoken on previous occasions before this committee of the Roebling collection of minerals and gems that came to us a short time ago. With that collection there came as a gift to the Smithsonian Institution an endowment providing for the purchase of additional specimens. As recent accessions from this source I show two samples of quartz, the yellow one being a citrine, a specimen from Brazil, and the blue one an amethyst which comes from South Carolina. These were purchased under the Roebling fund this past year and have now been added to the National Museum collections.

Another object of some interest is a nugget of platinum which comes from South America, one of the largest nuggets of that metal ever found in the continent. This particular specimen weighs 19 and a fraction ounces, avoirdupois, and cost approximately \$1,500. As a metal that is its value; as a museum piece it is worth considerably more, because of its peculiar form.

In connection with Mr. Stirling's work as Chief of the Bureau of American Ethnology the museum profits very decidedly through archeological and other specimens that are brought to it. This last summer we had a party of men on St. Lawrence Island, in Bering Sea, excavating at an old village site. Now, this area is of great importance historically because archeologists tell us that man came to America across Bering Sea. St. Lawrence Island in this sea is presumably one of the stepping stones that was used by early man in coming to the American continent.

In primitive villages there is no method of garbage or refuse collection. Anything that is discarded is simply thrown out of the door and lies there until it disintegrates or is buried. When villages remain in one place from year to year there are accumulations of deposits of such refuse that are termed by archeologists "kitchen middens." These kitchen middens may contain many objects of value in telling the character of the primitive people who inhabited the village. Mr. Collins, of the staff of the National Museum, who was on the St. Lawrence expedition last summer traveling under funds furnished through the Smithsonian Institution, went to a little island called Punuk, which lies perhaps half a mile off the coast of St.

Lawrence Island. There he found an old village site with a kitchen midden 16 feet deep. In other words, a village had been located at that place so long that 16 feet of refuse had been built up. In cutting down through this midden he found many objects of carved ivory and of stone, all of them prehistoric; that is, all of them antedating the year when Columbus came to America, and many of them very beautifully carved. We have upward of four thousand of ivory, wooden, and other implements from this one expedition. Here is one of them, an object made of bone that was apparently a handle used for carrying a box or a load of some kind. You notice it is perforated at either end and I call your attention to the delicate tracery of the carving on it.

This object [exhibiting] of ivory is supposed to be a decoration or ornament of some kind used by the Eskimos on their armor. Here is a harpoon point, and here an object that might be termed an Eskimo Venus [exhibiting]. It is an emblem of fecundity, very, very old. At the bottom of his excavation Mr. Collins found the lowest house sites at a level 5 feet below high tide. In other words, this village had been first settled so many hundred years ago that the land had subsided 5 feet since that date, while the building up of the midden had kept the successive levels above tidewater.

Another excavation that has brought many specimens of similar kind is one made by Mr. Krieger in Santo Domingo. In 1927, when I was traveling in that Republic and I saw a number of areas where there were considerable deposits of midden material in caves and elsewhere. Mr. Krieger was sent down to examine them and brought back a rich collection. Of these I will exhibit only one little charm, known as a zeme, which was used by the medicine men to bring favorable action upon any matter that might be up for discussion. It is a very tiny one, perhaps one used as an amulet. They had them in large sizes up to 2 feet in height.

As for other objects that have come to us, Mr. Stirling has some here that are of peculiar interest.

SPECIMENS FROM NEW GUINEA

Doctor STIRLING. If I may speak at this point, these [indicating] are some of the articles that I collected in New Guinea during 1926 and are particularly interesting as representing the highest type of implements that we found among a people who are as yet unacquainted with the use of metals or of any of those articles that we usually consider indispensable to civilization and to livelihood generally.

Here is a type of stone ax [exhibiting] that we found these people using. That tool, crude as it is, is the sole implement that these people have for clearing off the dense jungles of tropical hardwood to permit planting their crops of sweet potatoes and so forth. It is also used, incidentally, as an implement of warfare. It is interesting to notice that the blades on this stone ax are set at a little angle in the handle, so as to throw the blade when it cuts a chip from the tree, automatically flipping the chip off as the stroke goes downward.

I have a few other articles from those same people. This is a head-dress [exhibiting] which is not dissimilar to some of the head orna-

ments worn by our white American Indians, though this comes from the New Guinea natives. It is made of the feathers of the cassowary. Some of the ornaments affected by these people are a little bizarre from our point of view. This is from one of the Papuan tribes in New Guinea, a kind of a medallion made from a human lower jaw [exhibiting]. It is worn around the neck as a bit of ornament. The tribes in question are cannibalistic at the present time and, after killing their enemy, they preserve the skull, which is decorated, while the lower jaw is usually made into an ornament of this kind to be worn about the neck.

Aside from the stone ax which you have seen, these tribes have but two other sorts of stone instruments. It is interesting to show all three, because that is their complete equipment in the way of tools [exhibiting]; whereas we get along with a multitude of complex machines, these three implements, the stone ax, this knife of a piece of hard fine-grained stone, and a small chisel-like piece of stone, are the only tools that these savage people possess yet they manage to serve all of their needs with these three. Incidentally a knife of this sort is used for shaving. The whiskers are plucked out between the thumb-nail and the edge of the blade one by one. In action it is not dissimilar to some of our own modern razors.

Mr. SUMMERS. I would not want to be shaved more than once.

Doctor STIRLING. Curiously enough these people, probably the most completely isolated of any people in the world to-day, have tobacco for which they make pipes with a bowl hollowed out of an acorn or seed and fitted with a reed stem in this fashion [exhibiting]; the tobacco is twisted in this form [exhibiting], which they carry around and break off pieces to load the pipes. It is interesting to find tobacco used under such primitive conditions as we find those people living.

Mr. VINCENT. What do they use to fasten the stems to the bowl?

Doctor STIRLING. They use pitch, or a sort of resin from trees, and to keep it from being sticky they rub it with grease after the stem is fitted into the bowl.

Mr. MOORE. Did you bring back a great collection from New Guinea?

Doctor STIRLING. Yes.

Mr. MOORE. That was the first expedition made to New Guinea by white men, was it not?

Doctor STIRLING. It was the first expedition into the interior of Netherland New Guinea.

Mr. MOORE. How many objects did you bring back which are now in the National Museum?

Doctor STIRLING. We brought back a little over 8,000; between 8,000 and 9,000 specimens. It is probably the largest single collection that ever came out of New Guinea.

Doctor WETMORE. Also one of the finest.

Mr. VINSON. How long were you making that collection?

Doctor STIRLING. We were in there, Mr. Vinson, a little more than 11 months. We entered the island in the middle of January and left at the end of December of that same year, so that we spent practically one full calendar year. It took about a year and a half, however, to make the expedition, because we had to outfit in Java and to go from this country.

DESCRIPTION OF EXPEDITION INTO NEW GUINEA

Doctor ABBOT. Tell them how the pygmies looked as they spied you flying over them with an airplane.

Doctor STIRLING. We brought an airplane with us, of a type at that time, in 1925, about the best available. We used a Liberty motor of 400 horsepower, which would be considered a bit antiquated now but was the last word then. Inasmuch as there were no maps available of the interior of New Guinea, we did not know what conditions we would encounter, or what detailed plans to make in advance for handling supplies for the large party that we had. We did not know in which direction the rivers would run or what the best passes would be through the mountains. So we used the airplane for reconnaissance work in flights over the country and were able from the air not only to select the route that seemed best to us to follow to the interior, but by means of the airplane we located clearings in those remote interior mountains which indicated the villages of the pygmy peoples whom we hoped to find there. In that way, we were able to plan our overland transport with a rather minute accuracy as to the necessary number of carriers and of supplies and also to estimate the time required. Travel by land is extremely difficult there; there are no trails in most of the country and the rivers are barred by dangerous rapids. In addition much of the country is very unhealthy. It required six months of continuous travel for us to traverse some 400 miles between our base camp and the mountains in which the pygmies lived—a distance, incidentally, which we had made in about four hours during our reconnaissance by airplane.

On the first flight we made with the plane into the interior, we landed at the foot of the rough central mountains, hoping to be able to establish a small working camp by means of the plane alone, where we could start out and do our scientific work without the months of delay that would be necessary if we had to enter on foot. We brought in, on the first long flight that we made to the interior, about 800 pounds of foodstuffs packed in sealed tins, that we intended to cache. If we found it practicable, we expected to keep this up and establish a base. Only the pilot of the plane and myself went on this first trip, because we wished to carry as much food as we could. We finally landed in the far interior, but found later that the place where we landed was not only the most densely populated of the entire district that we went through, but that the people in the region were the most hostile of any that we encountered, so that where we had hoped to make friendly contact with the natives, we were greeted instead by a shower of arrows and barely managed to get away with our lives in the plane, and having to desert all of the supplies that we had brought in. We decided then that our little plan, while very ingenious, was very impracticable, so that we had to take the slower route and the prolonged work of traveling by canoes inland.

Mr. VINSEN. Did you get back into that region again?

Doctor STIRLING. Yes; we went through that identical spot later on. We lost a number of our men there by the Papuans, as every time our transport passed through that particular section of country they were ambushed and a few of our men were killed on each occasion. Our second arrival, by means of our canoes, was rather in-

teresting. Among the supplies we had left were a number of tins of red Sun-Maid raisins. We found the Papuans wearing these raisins around the waist, these being the only things they had on. As a rule these people went completely naked most of the time.

We were able to go by canoes to the foot of the mountains and then in overland travel cut trails through the hills. While the jungle was very dense, our way was through an uninhabited stretch of the country and was not as dangerous as traveling through the lowlands.

Mr. VINSON. Did you ever ascertain what they thought about the airplane dropping in on them?

Doctor STIRLING. Only in a general way. Later, as we went along, we communicated by signs with the people, asking by gestures if they had seen the plane; without exception they had, and very obviously it had made a tremendous impression upon them. It was curious to see these people, who are very apt at sign language and pantomime, putting out their arms in a horizontal fashion and running up and down, making the most terrible sounds with their lips, which were intended to reproduce the noise of the motor of the plane. Then they would wind up by throwing themselves in the mud on the edge of the river and burying their faces. Evidently they intended to convey to us the notion of what they had done at the time they had seen the plane. When we were actually flying above them we sometimes saw them in their canoes on the river, and, seeing the plane, they would usually jump overboard and swim ashore. Of course, it was hard for them to understand the nature of the plane. On one occasion I recall that some one who was trying to put over the idea to the Papuans pointed to me, meaning to indicate that I had been up there in the plane. For some reason this seemed to terrify them considerably. They began backing away from me with their eyes fairly popping out of their heads; later they would not come near me at all, and we figured out finally that they evidently thought I had the power in some way of being able to metamorphose myself from a human being into the flying monster they had witnessed. The idea did not appeal to them much; at least, they did not wish to be in too close proximity.

One other thing occurs to me on looking over these specimens in connection with this little group of small sticks that I have here. When we were up among the pygmies we utilized various devices to impress them. Among other things, I performed a sleight-of-hand trick, where I apparently produced a box of matches from a small piece of wood placed under my handkerchief. Then I presented these matches to the group that was looking on. The next day I received about a hundred of these little bunches of wood, carved out in this way [exhibiting], which they came bringing to me, wanting them to be transformed into matches for their use. I was compelled to retrench.

Mr. SUMMERS. You lost caste right then and there?

Doctor STIRLING. I decided then and there that I would not practice deceit any more.

Mr. SUMMERS. What is the size of those pygmies?

Doctor STIRLING. The average stature for men is 4 feet 10 inches and for women about 3 inches less than that. There was extremes, of course, both considerably above and below that figure.

GOVERNMENT OF PYGMIES

MR. VINSON. What sort of a government do they have?

DOCTOR STIRLING. They have a very simple form, nothing that we could term a political government. The villages are small, consisting of groups of about 25 or 30 huts placed in a clearing of about 8 acres in extent. This clearing is worked by the entire group in common, on a socialistic basis so that each village really constitutes a clan, that is to say, a group of blood relatives, or relatives by marriage. They are governed by the man of the most intellectual ability and initiative among them. His position as head man is that purely of an adviser. No individual is compelled to obey any of his suggestion, but, as a matter of actual practice, all usually do. There does not seem to be any amalgamation of villages or of the clan groups into what we might call a tribe, other than a grouping among those who speak a common language.

There is a rather amazing variation of languages in New Guinea, and we found in the primitive territory which we visited three separate languages spoken by the pygmies alone. One could scarcely travel a distance of 10 or 15 miles without getting into a totally new tongue. That, of course, made attempts at communication very difficult, as it is impossible to get interpreters for any of these people. There are no people living who have a more primitive form of government, their system being really a family rule, each family being entirely self-sufficient. Each raise their own crops and build their own houses and villages, and everything that is done for them they do themselves. There is no specialization among them such as we have in our society. Each individual does all of the things that everyone else does.

MARRIAGE AMONG PYGMIES

MR. SUMMERS. Are they polygamous?

DOCTOR STIRLING. Yes; the pygmies are polygamous, but more in theory than in fact, because, for some reason which we were unable to determine, the men outnumber the women. The Papuans are polygamous in an extreme fashion. Marriage is based on economical wealth, and we found among the tribes, at least in the neighborhood of our base camp, that, as a rule, in a village of about 100 adults, probably five of the older men in the village would be married to all of the marriageable women of whatever age, because they had accumulated all of the wealth of the community, and therefore they were the only ones who were able to afford wives. At any rate, they could outbid the younger men when it came to purchasing a wife.

MR. WASON. Do they sell the women on the auction block?

DOCTOR STIRLING. Among the Papuans, the women do not seem to have much to say about it. With the Pygmies, I think the woman probably does not have to accept as a husband any man of whom she disapproves. They have rather interesting marriage regulations, as they go through a series of trial marriages before they finally formally marry. The young man who has reached a marriageable age visits different women for periods of two or three weeks at a time in neighboring villages, and, of course, always marries outside of his own village to avoid incest. After living in these temporary

alliances for a period of perhaps six or seven years, a man will acquire enough standing in a community to take a permanent wife.

In making these temporary marriages, if we might call them such, the procedure is not as simple as it might seem, as the suitor has to go through a sort of ordeal before he can take up residence with the girl. He brings with him on this occasion a couple of friends who dress up in their best, which is principally a coat of fresh paint, who go with the young man to the edge of the village.

Then the two friends go in as advance agents and announce his coming and tell the relatives of the girl that he wishes to live with her. The male relatives of the woman get their bows and arrows together and line up outside of the house. Then the suitor comes in and takes position crouching about 25 or 30 yards distant from these armed men, usually five or six in number, who stand in a line. One at a time they start to shoot arrows at him, drawing bow slowly, taking careful aim, and then letting fly. As soon as one man has released his arrow, the one next to him starts to draw his bow so that there are intervals of perhaps 2 seconds between each shot. They never shoot two at a time. The young man dodges these arrows as best he can, and it is a rather interesting thing to see how active he is. He squats on the ground to make as small a target as possible and uses his forearms to ward off the arrows, catching the shaft of the arrows on the forearms so as to deflect them. Usually this procedure continues for 10 to 15 minutes, and in that time about three or four of the arrows may draw blood.

I only witnessed that myself on a couple of occasions and there were no serious wounds, but every grown Pygmy man has his body literally covered with scars from arrows that they have received in this way as souvenirs of their younger days. The formal marriage that finally takes place is permanent, and as a part of the ceremony the groom chops off one of the fingers of his bride with a stone ax such as this one you were just looking at. Usually this is one of the middle fingers of the left hand, taken off ordinarily right at the lower joint. Each time a woman is remarried another finger is cut off in the same way, so that one can tell how often a woman has changed husbands by examining her hands. A man cuts his own finger off when his wife dies.

Doctor WETMORE. Mr. Stirling's account will give you something of the conditions under which some of our collections are secured.

Mr. SUMMERS. It is very interesting.

Doctor WETMORE. In this appropriation there is slight addition to provide better housing, better care for all of the rich collections that come to us. We have shown you a very few of the interesting things that we have received in the last year and told you something of the way some of those things have been secured.

HEATING AND LIGHTING, ETC.

Mr. WASON. The next item is—

For heating, lighting, electrical, telegraphic, and telephonic service, and traveling expenses, \$90,160.

Is the increase \$6,120 requested on account of the Welch Act?

Doctor WETMORE. This appropriation provides for the heating, lighting, electrical, telegraphic, and telephonic service for the Mu-

seum. The amount requested is the same as that granted by Congress for the current year, with the addition of \$6,120 to cover increases in salaries to the Welch Act.

The only increase is that to cover additions to the salary roll due to the Welch Act. Otherwise the appropriation stands as it did last year. This appropriation is concerned with the heating and lighting plant that supplies electricity and heat to all of the buildings in which the National Museum has exhibitions. If there is any question regarding any of the items, I shall be very glad to explain them.

HOUSING AND DISPLAY ROOM FOR COSTUMES OF EX-PRESIDENT'S WIVES

Mr. SUMMERS. When are you going to be able to have better housing or display room for the costumes of President's wives?

Doctor WETMORE. I hope that before too long we will be provided with a proper building in which all of our historic collections may be more properly displayed. At the present time the costume exhibits are in square cases of a form which is somewhat antiquated. I have contemplated building a case around the hall in which these cases are now shown, to contain all of the figures illustrating the President's wives of the different administrations where they can be displayed a little more gracefully than at present.

Mr. SUMMERS. Around the wall?

Doctor WETMORE. Around the wall. It has not been possible to put that into effect as yet, because of the extreme crowding to which we are subjected.

Mr. VINSON. I understand you say the entire increase in this item is due to the Welch Act?

Doctor WETMORE. Yes, sir.

PRESERVATION OF COLLECTIONS

Mr. WASON. The next item is—

For continuing preservation, exhibition, and increase of collections from the surveying and exploring expeditions of the Government, and from other sources, including necessary employees, travel, uniforms for guards and elevator conductors, and all other necessary expenses and not exceeding \$5,500 for preparation of manuscripts, drawings, and illustrations for publications, \$570.084.

Doctor WETMORE. This is the main appropriation for the maintenance of the Museum and covers all expenses not specifically appropriated for otherwise. It includes the main salary roll for the scientific staff and guards, as well as the labor and char force. Under it, therefore, there is covered the work of identifying, classifying, and exhibiting the national collections, the preparation of books and memoirs presenting the results of study of the collections, expenses in connection with new additions to the collections, and the cost of maintaining the extensive public exhibits of the Museum.

Of the increase indicated for 1930 the sum of \$57,758 is required for increase in the salary roll due to operation of the Welch Act.

The amount of \$9,500 is estimated for five additional employees required to carry on the necessary work of the organization. The first of these additional employees is one assistant curator (P. 3) for

the division of mollusks at \$3,200. This division is charged with the care of the collections of shells of all kinds, a group that not only includes such species of economic importance as the oysters, clams, and pearl shells, but also the many species of fossil shells that determine the geological age of important oil and mineral bearing rocks.

In addition, sea and fresh water shells of all kinds are of great popular interest, so that we are called upon to identify thousands of specimens annually. For many years in the division concerned with this work we have had the advantage of assistance from two independent workers who have been removed by death. The present staff in the division of mollusks, with only two scientific members, is wholly unable to keep up with the work. In addition to this necessity for assistance, a younger member is required to be in training for the time when he will be needed to replace one of the older men.

There is included also one clerk (CAF 4) at \$1,800 to assist in the steadily mountain routine due to the necessary papers required by the Personnel Classification Board, the Bureau of the Budget, the retirement act, and other similar business. The present force allotted to these tasks is unable to keep abreast of them and assistance is urgently needed.

An item of \$4,500 provides for three sergeants for the watch force (CU 5) at \$1,500 each. At the present time we have one captain and three lieutenants as officers of the watch. When one of them is absent it is necessary to make a private acting lieutenant, obviously bad administration, since it is unfair to make a man responsible for the work of others and then in a few days to reduce him again to the level of those whom he may have found it necessary to discipline. Also the watch force is undermanned and requires additional help. The appointment of three sergeants, one for each of the three watches of the day, will assist materially in relieving a bad situation.

There is allotted \$600 addition for the purchase of a light truck for use in hauling mail, distributing ice and supplies to our various buildings, and the general miscellaneous hauling for the Museum. This work is done at present by a 1924 model Ford truck, a machine that is getting old and will need to be replaced next year.

A decrease of \$320 in allotments under certain items of supplies to permit the use of the sums above indicated brings the total increase under this appropriation down to \$67,538.

This item carries the principal appropriation under which the National Museum operates, and there is carried in it the main salary roll of the scientific staff, the guards, watchmen, cleaners, laborers, and so on, and what ever provision there is for the purchase of necessary materials in connection with this work. The appropriation for 1929 is \$502,546; the estimate for 1930 carries \$570,084. The increase is \$67,538; \$57,758, or the major part of that increase, is required as an addition to the salary roll through the operation of the Welch Act.

ADDITIONAL EMPLOYEES

There is further allowed by the Bureau of the Budget the sum of \$9,500 for five additional employees, the first of these being an

additional assistant curator in the division of mollusks, a P-3 position at \$3,200. That division is charged with the care of one of our largest collections, one that deals with such species of economic importance as the oysters, clam, pearl shells, the ship worms, and, in addition, many thousands of species that are admired more for their beauty than for their utility. The staff at present comprises one curator and one assistant curator. The work that comes to that division is beyond the capacity of those two men to carry on alone unaided. For many years we had advantage of advice and assistance from two independent investigators who have been removed by death, and we now find ourselves in a situation where it is necessary to ask for further curatorial assistance. This is of importance not only to assist in keeping up the growing work that comes to this division but also to provide replacement for one of the older men should death or retirement intervene.

The group of mollusks has considerable economic importance. You may know something of the blood flukes and liver flukes that affect man and domestic animals. Each one of these creatures lives part of its life in the blood stream of some warm-blooded creature—a man, cow, sheep, or some other animal—and part of its life in the blood stream of a cold-blooded creature like the mollusk; it is necessary to have these two separate hosts to support the life of the fluke or it can not exist.

Mr. VINSON. In regard to your associate scientists, I see you have 13 associate scientists already provided for.

Doctor WETMORE. Yes, sir.

Mr. VINSON. Is it your notion that those 13 can not do the work that this extra one would do?

Doctor WETMORE. The National Museum is organized under four departments dealing with different branches of science. There is a department of geology, a department of biology, a department of anthropology, and a department of arts, industries, and history. Each of these departments has separate divisions concerned with some one branch of their particular group. Each of the divisions has its curator and assistant curators. It is not practical to ask a geologist, for example, to do the work of a biologist, or a curator of history to perform the work of an anthropologist. In such distinct fields of research, the training necessary is so utterly different that the men are not transferable.

Mr. VINSON. Have you curators in the biologic division? In other words, who is doing the work that is contemplated to be done by this associate scientist?

Doctor WETMORE. At the present time that work is divided, as best may be, between one curator and one assistant curator. The amount of work required in this particular group is so great that these two are not able to keep abreast of it at the present time. The Bureau of the Budget have investigated this matter carefully and have acceded to our request for additional assistance here. The force as at present constituted is entirely too small for the type and amount of work required.

Mr. WASON. That gives you 14 under this estimate as against 13 you have now?

Doctor WETMORE. Yes, sir. Do you wish any further statement regarding that item?

Mr. WASON. I think that is sufficient.

Doctor WETMORE. There is also one clerk, at \$1,800, to assist in the routine business of our administrative office. In recent years the great increase in the paper routine required through the work of the Personnel Classification Board, the Bureau of the Budget, the Civil Service Commission, and other governmental agencies has grown to such an extent that the present force can not handle it. As a matter of fact, last year one of our best clerks concerned in that work broke down completely under the strain and had to be relieved. We have been carrying on as best we can with temporary service for a limited period, but that is highly unsatisfactory. We need another employee in that position.

The final item of personnel, that of three sergeants of police, is also quite necessary to us. At the present time our police force consists of a captain, three lieutenants, and one sergeant. The one sergeant during the day is stationed in the Freer Gallery of Art. The oversight of the men in the other four buildings in which we have exhibits is divided between the captain and the lieutenant of the watch on day duty. We have three lieutenants, one for each of the three 8-hour watches of the 24-hour day.

When one of these lieutenants is off on leave or is ill, it is necessary to call in a private and make him acting lieutenant for that period. Obviously this is very bad administration, because such a man, as acting lieutenant, may be called upon to discipline his fellows and to jock them up for their shortcomings. Then, in a few days, he is retired to his former status of private when naturally there is considerable animus against him. It is difficult to conduct the service properly in such a manner. Furthermore, we are quite undermanned as regards the guard service, and we need more help. The three sergeants will afford a certain element of relief.

PURCHASE OF HAULING TRUCK

The final item of increase is that for one light truck for use in hauling and general work of the organization. Up until this year, we have had our hauling done under contract by an old chap who has been with the Smithsonian Institution for years and years and has done it with horses. He died last January and it was necessary to make some other arrangement. I suppose we were the only organization in Washington that was using horse-drawn transportation for that work at this late day. Our old teamster had worn out seven horses and four wagons in the service of the Smithsonian Institution during the 51 years that he was with us. At his death, it became necessary to adopt some other expedient. We bought a second-hand Ford truck for \$225 and took a laborer who had been assisting this teamster and made him driver of the truck. The truck purchased second-hand is a 1924 model. I look at it whenever I see it and wonder if it will last us through this year. We were allowed \$600 for the purchase of a new truck in 1930, which is wholly essential to the work of the organization.

PURCHASE OF OFFICERS' UNIFORMS

There is one slight change in the wording of the item for preservation of collections to which I wish to call attention. You will recall, Mr. Chairman, that last year there was included in the appropriation on item of \$1,200 for uniforms for guards and elevator conductors. Up to that time our men had not been in uniform and provision was made to put them in uniform, as properly should be done, for the information and assistance of visitors. The comptroller has informed us that it will be necessary to have provision for the purchase of uniforms definitely included in the wording of the act. He has consented this year to pass the purchase of these necessary matters in view of the clear statement that was made before this committee and the Bureau of the Budget in the hearings last year, but the matter will have to be rectified in another year.

Mr. VINSON. What is the item for uniforms?

Doctor WETMORE. It is shown under supplies and materials as outer garments, \$1,200. The item for 1930 is \$1,200 also.

Mr. VINSON. The same amount that was carried last year?

Doctor WETMORE. Yes, sir. Under that amount, you may be interested to know that we have put 42 men in uniform; 38 men on the police force and 4 elevator conductors. The total expense to date this year is \$1,177.15. The item is continued at \$1,200 for 1930, as for 1929. We believe that the uniforms we have will last through the year in very good shape, but will need to be replaced next year. I may say it has added very appreciably to the general appearance of the National Museum to have the guards in uniform; it has also been of great assistance to visitors. Heretofore our guards were merely men walking around among the crowd without hats on, marked from others by a badge on the breast—if you could see it. Now, by means of the uniform, our watchmen stand out so that they can be seen, if necessary.

REPAIRS AND ALTERATIONS TO BUILDINGS, SHOPS, ETC.

Mr. WASON. The next item is:

For repairs and alterations of buildings, shops, and sheds, including all necessary labor and material, \$21,080.

Doctor WETMORE. This appropriation covers all repairs to roofs, walls, ceilings, floors, and windows of the Museum buildings, comprising the Natural History Building, the Arts and Industries Building, the Aircraft Building, the South Shed, and such portions of the Smithsonian Building as are used by the Museum.

The estimate for 1930 exceeds the current appropriation by \$3,350. Of this increase \$1,080 is required for additions to salaries through the operation of the Welch Act.

A further item of \$360 provides for one rate step-ups of \$60 each for six employees, three of whom, though having high efficiency ratings, did not benefit by the general efficiency promotions granted by the Committee on Appropriations last year as when this subject was up with the committee these three employees were at the average salary of their grade. Since then the Personnel Classification Board, recognizing that these workers were paid less than elsewhere in the

Government service, has reallocated these positions to a higher grade, thus removing the restriction from promotion. It may be added that by this reallocation these employees received no increase in salary, since the average salary of the old grade was the initial salary of the new one.

A further item of \$2,270 added to the amount for repairs and alterations is intended to permit the construction of a gallery in a room devoted to the storage of the collections in vertebrate paleontology. The collections have now filled all available space. To relieve crowding and provide space for further material there is required the construction of an overhead gallery approximately 23 by 73 feet in extent. The specimens included are valuable and important in their scientific value and entirely merit this expense for their proper care. The cost of such a gallery is estimated at about \$3,000, but the Bureau of the Budget was assured that if the 1930 appropriation carried the total here indicated of \$21,080 the gallery would be constructed, if need be, at the expense of other repairs.

The change in the wording of this act for this appropriation by the addition of the words "and alterations" is intended to give the necessary legal sanction for the Comptroller of the Treasury to permit expenditure for the gallery mentioned under this appropriation rather than to cover this gallery in a special item.

A decrease of \$360 in allotments under certain items of supplies brings the total increase under this appropriation down to \$3,350.

Mr. VINSON. There is an item there of \$360 increase in salary, and then you have an increase of \$2,380 for repairs and alterations. Does that make up the difference, in addition to the increases under the Welch Act?

Doctor WETMORE. The Welch Act increase amounts to \$1,080. In addition, the Bureau of the Budget has allowed us \$360 to provide for a one rate step-up for six employees. Last year, when the subject of step-ups for efficiency was before this committee, there were three employees in this group who were then at the average of their grades and could not be considered for promotion. Since that time the Personnel Classification Board has considered the matter of these mechanics and has reallocated them to a higher position. In that reallocation they were given no increase in salary. It is simply another case where the average of the old grade was the entrance rate of the new one. This provision for one rate step-ups for these men is warranted; they are well worth it as skilled workers, all of them.

There is also a slight change in language in this item through the additions of the two words, "and alterations." That is to provide for the expenditure of approximately \$3,000 for the building of a gallery in one of our storage rooms, that of the vertebrate paleontological collections. The room is one with very high ceilings, so that there is a great deal of waste space above; it is now so crowded on the floor that there is no more room for anything. To cover this matter we have been allowed \$2,270 additional to the existing appropriation, and I have assured the Bureau of the Budget that we can make the necessary alterations with that sum, plus a small amount additional to be gained by retrenchment in other expenses. It is estimated that the gallery will cost in the neighborhood of \$3,000.

Those are all of the increases under this appropriation.

PURCHASE OF BOOKS, ETC.

Mr. WASON. The next item is:

For purchase of books, pamphlets, and periodicals for reference, \$2,000.

Doctor WETMORE. This fund allows the purchase of necessary books and periodicals for use in the study and naming of the national collections and the scientific work of the organization in general. The fund is of great importance to our work and the full amount indicated is required. The amount requested for 1930 is the same as the current appropriation. There is no change in that item.

POSTAGE STAMPS AND FOREIGN POSTAL CARDS

Mr. WASON. The next is:

For postage stamps and foreign postal cards, \$450.

Doctor WETMORE. This fund covers the cost of postage to foreign countries where the Government frank will not carry. The full amount is required for the transaction of our necessary foreign correspondence. The amount requested for 1930 is the same as the current appropriation.

NATIONAL GALLERY OF ART

Mr. WASON. The next item is:

For the administration of the National Gallery of Art by the Smithsonian Institution, including compensation of necessary employees, purchase of books of reference and periodicals, traveling expenses, and necessary incidental expenses, \$34,853.

Mr. DORSEY. The National Gallery of Art, which is the legal custodian of all objects of art belonging to the Government, is administered by the Smithsonian Institution. At present the gallery, which contains art works valued at many hundreds of thousands of dollars, is, pending the erection of a separate building, housed temporarily in the Natural History Building of the National Museum.

The appropriation asked in the Budget is the same as that for the current year, but the addition on account of the Welch Act should be increased from \$3,685 to \$4,105. This increase of \$420 is due to an error in calculating the salaries of seven watchmen under the provisions of the Welch Act, and should be added to the amount of the appropriation asked of \$34,853, making the total estimate \$35,273.

Mr. WASON. Is there anything further?

Mr. DORSEY. The appropriation asked is the same as that for the current year, with the addition of the amount necessary for the Welch Act. When we first figured the Welch Act for this appropriation, the watchmen were figured at an erroneous rate, so that we need an additional \$420 in the appropriation, to the amount asked, making a total of \$35,273, against the total of \$34,853, which we first requested, due to the fact that these watchmen were entitled, under the Welch Act, to \$60 more a year than we had allowed them. \$420 is the total; there is no other change in the appropriation.

PRINTING AND BINDING

Mr. WASON. The next item is:

For all printing and binding for the Smithsonian Institution, including all of its bureaus, offices, institutions, and services located in Washington, District of Columbia, and elsewhere, \$95,000, of which not to exceed \$7,000 shall be available for printing the report of the American Historical Association: *Provided*, That the expenditure of this sum shall not be restricted to a pro rata amount in any period of the fiscal year.

Doctor WETMORE. This appropriation provides for the printing of the Smithsonian Annual Reports; the Bulletins, Proceedings, and Reports of the National Museum; the Bulletins and Reports of the Bureau of American Ethnology, and for miscellaneous printing and binding; also the report of the American Historical Association.

The estimate is the same amount as that allowed by the committee for the current year. It is believed that the amount asked will be sufficient to provide for the ordinary needs of printing and binding during the next year.

Mr. WASON. That is the same as last year?

Doctor WETMORE. That is the same as last year; there is no change in it. This is the item that carries the expenses of printing and binding for the bureaus under the Smithsonian Institution, together with the annual report of the Board of Regents. We are getting along very well with the present appropriation. You may recall it was increased \$5,000 last year because we had such an accumulation of manuscripts. You may care to glance briefly at some of the memoirs and papers that have come out this last year. Here is a work on the life history of some of our shore birds; here an account of the flora of the Panama Canal Zone; here a handbook on the collection of heating and lighting utensils of the National Museum; all of general, popular interest. These that I exhibit now are intended more for technical workers, being bulletins dealing with various collections of the National Museum, and here is a group of shorter papers that appear in the proceedings of the Museum.

Mr. VINSON. Do you want that sum to remain at \$95,000, or do you want that reduced?

Doctor WETMORE. We want it to remain as it is, sir. If it is reduced, we shall find ourselves in a situation where we can not carry on properly; in other words, we will be doing work without the privilege of giving it an outlet for the use of others outside of Washington, which will be really a waste of effort.

TUESDAY, JANUARY 8, 1929.

BOARD OF MEDIATION

STATEMENTS OF HON. SAMUEL E. WINSLOW, CHAIRMAN; GEORGE A. COOK, SECRETARY; AND ROBERT F. COLE, DISBURSING OFFICER

GENERAL STATEMENT

Mr. WASON. Mr. Winslow, have you any general statement that you would like to make concerning your work?

Mr. WINSLOW. I will make a brief statement.

Last autumn the Board of Mediation received word from the chairman of the Appropriations Committee to the effect that he would like to have us send him an outline covering the items which appeared on our set-up made on direction of the Bureau of the Budget, as directed by the President. We sent such. You have it here and can put in the record as of our presentation if you so desire. All that I can say and would say in making an offhand statement is embodied in that communication.

Mr. CULLEN. This is a complete statement, Mr. Chairman. Why not put it in the record?

Mr. WASON. Let it be put in the record.

(The statement referred to is as follows:)

JUSTIFICATION OF REQUESTED APPROPRIATION AND A DETAILED STATEMENT OF SUB-CLASSES OF ITEMS OF PROPOSED EXPENDITURES 1930 BUDGET

(Prepared November 15, 1928)

The total appropriation for the Board of Mediation as approved by the President for the 1930 Budget is \$348,270, subdivided into four appropriation units as follows:

Salaries and expenses of Board of Mediation-----	\$216, 570
Salaries and expenses, arbitration boards-----	80, 000
Emergency boards, railway labor act-----	50, 000
Printing and binding, Board of Mediation-----	1, 700
 Total-----	 \$348, 270

The following explanation of the necessity for the amount requested and detail of the major items is respectfully submitted:

SALARIES AND EXPENSES, BOARD OF MEDIATION

Salaries of members.—Allocation, \$60,000. This sum is to meet the statutory requirement. Under the provisions of the law there shall be five members of the board at \$12,000 per annum.

Salaries of office staff.—Allocation, \$96,940. Covers salaries in the departmental service and is exactly the amount necessary to meet the present pay roll. This includes increases under the Welch Act of \$7,100. No new positions are contemplated and no surplus has been provided to meet departmental promotions, although the rates of compensation as a whole are \$1,600 below the averages of the grades involved. The board has constantly resisted the building up of an unnecessary force, and in 1928 returned to surplus \$29,711.99 previously allocated to salaries of office staff. The board has 31 employees in its office staff, but 3 of this number are chiefs of the technical divisions, designated as mediators and used practically all of the time in field work.

Salaries of field employees.—Allocation, \$10,534. Requested to meet the salary of one mediator now on the rolls and one additional mediator that the board believes will be necessary by reason of recent development of a new phase of work involving the handling of grievance cases.

Supplies and materials.—Allocation, \$1,600. This estimate is based upon expenditures over the past two years, during which time the board expended an average of nearly \$1,500. In addition thereto approximately \$1,000 worth of supplies received from the former Railroad Labor Board was used; this supply is now almost exhausted.

Subclasses of item:

Mimeograph and ditto paper-----	\$500
Magazines and newspapers-----	200
Mimeograph stencils and ditto rolls-----	150
Envelopes-----	75
Folders and dividers-----	75
Carbon paper-----	50
Miscellaneous-----	600
 Total-----	 1, 600



